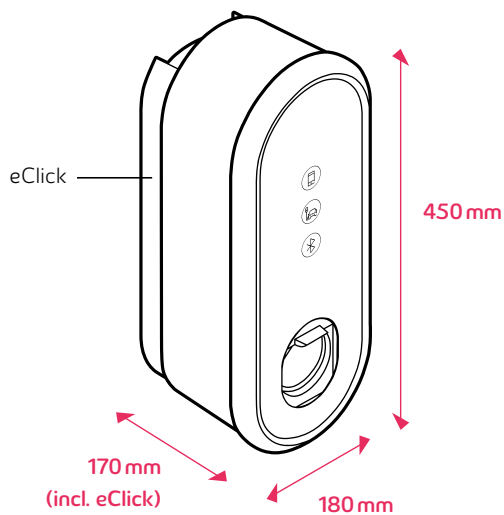


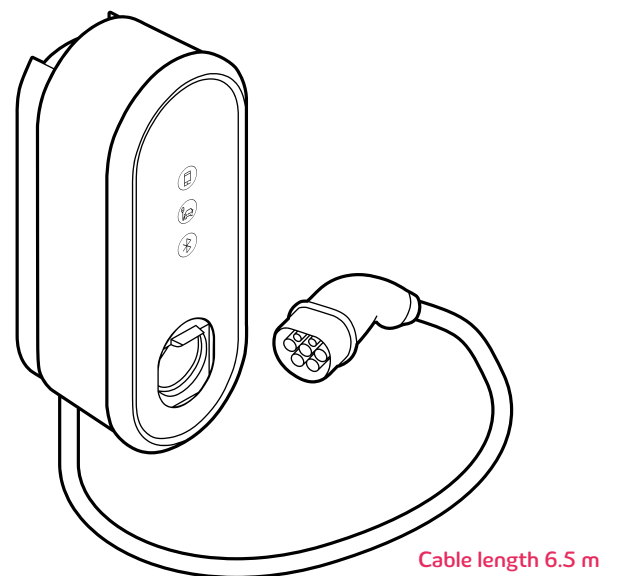
eBox smart

Data sheet

The eBox smart is a modern, leading-edge charging solution for electric vehicles. It can be used easily and quickly for charging up to 22 kW of power. The eBoxes can be mounted in the eClick on a wall or pole.
The eBox smart is available in two variants: one with a Type 2 socket and one with a Type 2 plug and cable.



eBox smart
with Type 2 socket



eBox smart
with Type 2 plug and cable

Key features

- Charging up to 22 kW
- Charging status displayed by 3 LEDs and LED ring
- Easy commissioning: simple loading unit snap-on to eClick and quick commissioning via app and Bluetooth
- Facilities for authenticating and paying for charging processes by app or smart cable
- Backend communication for B2B applications: OCPP1.6J via WiFi
- Backend communication for B2C applications: OCPP2.0 via WiFi

Certificates



eBox smart

Data sheet

General specifications

Number of charging ports	1
Cable length (version with cable)	6.5 m
Charging mode	Mode 3 (IEC 61851)
Applications	Protected internal areas; unprotected exterior areas exposed to rain and direct sunlight
IP code of the housing	IP55
Protection category (impact strength)	IK10 in accordance with IEC 62262:2002
UV protection	Outdoors (F1)
Housing material	Lexan® EXL9330 (copolymer)
Weight	3.1 kg (version without cable)/6.4 kg (version with attached cable) (each without eClick and without eSmartMeter)
Storage temperature	-30 °C to +80 °C
Packaging dimensions (W x D x H)	515 mm x 225 mm x 235 mm (version without cable)/ 695 mm x 370 mm x 235 mm (version with attached cable)
Power consumption in standby mode	6 W
Certification	CE certificate (tested and confirmed by a certified body)
Foliation	High-quality standard film; custom films possible for a surcharge
Charging port number	Charging port number lasered on shutter bracket in production

Working conditions

Operating temperature	-30 °C to +50 °C (full load output at -30 °C to +50 °C) Thermal overload protection: output power reduced at higher temperatures
Air humidity	5 % to 95 % as defined under IEC 61851-1 Ed.3/EN 61851-1 (2017)
Max altitude above sea level	Max 2,000 m (air pressure: 860 hPa to 1,060 hPa)
IEC protection class	I

Electrical input/power connection

Input power from eClick	Three-phase current 400 V AC, 32 A (22 kW)/20 A (13.8 kW)/16 A (11 kW) Alternating (single-phase) current 230 V AC, 32 A (7.4 kW)/20 A (4.6 kW)/16 A (3.7 kW)
Charging power	3.7/4.6/7.4/11/13.8/22 kW (16 A, 20 A, 32 A; single- or three-phase)
Output power	Three-phase current 400 V AC, 32 A (22 kW) or 16 A (11 kW) Alternating (single-phase) current 230 V AC, 32 A (7.4 kW) or 16 A (3.7 kW)
Plug assembly	Without cable: Type 2 plug assembly as defined under DIN EN 62196-2 with automatic plug locking, shutter With cable: Type 2 plug as defined under DIN EN 62196-2, plug compartment on eBox, shutter
Consumption measuring	eSmartMeter: optional for eClick, MID-compliant (Europe) and CE-certified

eBox smart

Data sheet

Protective equipment

DC residual current monitoring (protection of people)	Integrated AC/DC sensitive RCD, triggering at: DC 6 mA
Welding detection (indication signal for welded power contacts)	Connection via change-over contact (max. 230 V, 1 A), use e.g. for shunt release for disconnection of main power path
Integrated overvoltage protection	According to IEC 61851-21-2:2018 (ESD/surge/burst)

Communication

Vehicle communication	Charging current controlled via PWM pilot signal in accordance with IEC 61851-1:2017
Direct communication	Bluetooth Class 1 and 2 (power level)
Communication protocol B2B application	OCPP1.6J to innogy eOperate back end or to third-party provider backend
Communication protocol B2C application	OCPP2.0 to innogy eHome backend
Backend communication	WLAN with 2.4 GHz IEEE 802.11 b/g/n with WPA2 (antenna gain, frequency-dependent, max. 4.6 dBi)

Authentication

Authentication/activation	Free charging, eCharge+ app (smartphone app for iOS®/Android™)
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UI/UX

Display/interaction	LED ring for charging status; 2 status LEDs: authentication, vehicle link; 1 status LED as touch button: Bluetooth
Operating instructions	Graphical operating instructions have been installed on the product

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Data sheet

External accessories

User protection to be installed in sub-distribution

32 A connection: ABB F204A-40/0.03, Type A, 4-pin (short time delay operating voltage: 230/400 V AC)
16 A connection: ABB F204A-25/0.03, Type A, 4-pin (short time delay operating voltage: 230/400 V AC)

Type A RCD:

Short circuit/overload protection to be installed in sub-distribution

Over-current protection device:
32 A connection: ABB S203-NA K40A (rated switching capacity: 6,000 A)
16 A connection: ABB S203-NA K20A (rated switching capacity: 6,000 A)

The eBox smart is available for wall-mounting as the following variants:

eBox smart, Type 2 socket

eBox smart, Type 2 plug with cable

each including eClick

The eBox smart is not branded and has a neutral colour. On request, the eBox may be ordered with the innogy branding. Additional accessories, e.g. the eSmartMeter, may be included in the order.

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